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AUTHOR Wang, Margaret C.; Haertel, Geneva D.; Walberg, Herbert J.

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ABSTRACT

This paper provides an overview of the research base on fostering educational resilience among children whose circumstances place them at risk of educational failure-- particularly in inner-city communities. The purpose of this paper is twofold: (1) to provide an overview of the research base on fostering educational resilience among children whose circumstances place them at risk of educational failure and (2) to describe educational practices that are resilience-promoting and their implications for student development and learning success. A previous research synthesis (M. Wang, G. Haertel, and H. Walberg, 1994) identified 7 characteristics of the learner and 22 characteristics of the home, classroom, and community contexts that influence student learning. The research base of studies on each of these context categories is discussed. Findings from a long-term program of research on resilience development at the National Center on Education in the Inner Cities, a program that encompasses a range of studies, show characteristics of resilient learners and characteristics of inner-city classrooms that promote educational resilience. Enabling conditions that result in high levels of student engagement include an orderly and safe campus, student-centered and highly responsive classroom learning environments with well-structured classroom management systems, site-specific and ongoing professional development, and parents with high educational aspirations for their children. Findings from a recent meta-analysis support inclusive practices for children with special needs. The restructuring of curriculum and service delivery, combined with the creation of inclusive, stable, supportive learning environments, and increased access to family, school, and community resources can promote the healthy development and learning success of students at risk of school failure. (Contains 1 table, 1 figure, and 35 references.) (SLD)

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Laboratory for Student Success

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Fostering Educational Resilience in Inner-City Schools

Margaret C. Wang, Geneva D. Haertel, and Herbert J. Walberg

As the 1990s unfold, the nation's attention has been captured by the plight of increasing numbers of children and youth in circumstances that place them at risk of educational failure, particularly in inner-city communities. The quality of life in these communities is jeopardized by poverty, lack of employment opportunities, poor health care, crime, fragmented services, and despair. But this is only one side of the story; inner cities are also rich in culture, institutions, and other resources that can mitigate against adversity and promote healthy development and learning. Perhaps more importantly, these resources can further the capacity of individuals to overcome adversity and to develop educational resilience. Identifying conditions that promote resilience and pathways that lead to learning success is an area of investigation that has gained increasing attention in efforts to improve educational success of children and youth in U.S. inner cities. The purpose of this chapter is twofold: (a) to provide an overview of the research base on fostering educational resilience among children whose circumstances place them at risk of educational failure and (b) to describe educational practices that are resilience-promoting and their implications for student development and learning success.

CONTEXTS THAT FOSTER EDUCATIONAL RESILIENCE

Educational resilience in the context of our discussion is defined as the heightened likelihood of educational success despite personal vulnerabilities and adversities brought about by environmental conditions and experiences (Wang, Haertel, & Walberg, 1994). Furthermore, educational resilience is conceptualized not as the product of a single precipitating event, but of continuous interaction between an individual and characteristic features of the environment. A key underlying premise is that educational resilience can be fostered through interventions that enhance children's learning, develop their talents and competencies, and protect or buffer them against environmental adversities.

Research on factors that influence learning can be culled to identify protective mechanisms that mitigate against adversity and support healthy development and educational success. Findings from a research synthesis (Wang, Haertel, & Walberg, 1993) demonstrate the range of contextual influences that can be maximized to serve as protective mechanisms that mitigate against negative life circumstances while facilitating development and educational resilience. Based on results of 91 meta-analyses, 179 authoritative review articles, and a survey of 61 educational researchers, 7 characteristics of the learner and 22 features of the home, classroom, and community contexts that influence student learning were identified. Figure 6.1 shows the relative influences of the 22 influence categories. The rankings are

based on the calculated scores of the 22 influences, which were transformed into T-scores. *(T-scores* are standard scores with a mean of 50 and a standard deviation of 10.) As shown in Figure 6.1, the influences are depicted along a continuum of proximity to the learner, with those influences and contexts that are more proximal exerting more influence than those that are more distal.

Table 6.1 presents the average influence scores for the five contexts presented in Figure 6.1. Classroom, home and community, and school contexts, which are more proximal to learners and directly affect their day-to-day activities, have larger influence scores on average than the state and district policy context, which is more distal and indirect in its influence.

TABLE 6.1 Average Influence Scores for Five Sources/Contexts

Source/Context	*Average Influence-on-Learning Score*
Classroom Practices	53.3
Home and Community	51.4
Curriculum Design and Delivery	47.2
Schoolwide Practices and Policies	45.1
State and District Policies	34.5

The synthesis findings suggest that classroom, home and community, and school contexts can play a key role in fostering development and educational achievement. The research base on how each of these contexts affects the development of educational resilience is discussed below.

The Family

Of the 22 contextual influences on learning, "home environment/ parent support" is the second most influential category (see Figure 6.1). The home environment provides an abundance of resources even among families that are of limited economic means and/or facing severe hardships such as chronic illness, divorce, or early parental death. Parents (as well as other adults and older siblings) serve as children's first teachers, filling both nurturing and educative roles. Families foster not only children's physical growth but also their motivation to master the environment, their competence development, and their self-esteem. They provide knowledge about the world, opportunities to learn, models of behavior, and social and functional connections to the larger community.

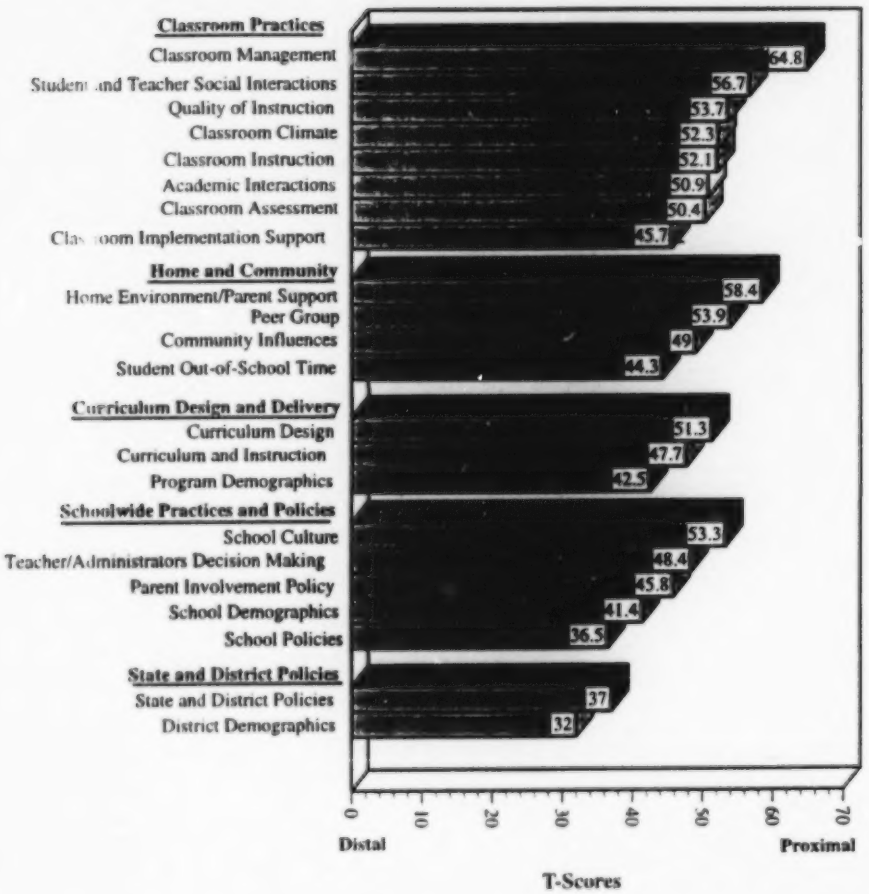

Figure 6.1. Continuum of Proximal to Distal Learning Influences and the Magnitude of Their Influence on Learning

Short-term prospective studies demonstrate that factors protecting against adversity include a positive parent-child relationship, family cohesion, warmth, assigned chores, responsibilities for the family's well-being, an absence of discord, and other secure childhood attachments. Other family attributes associated with school attendance and achievement among at-risk students include monitoring television viewing, reading to young children on a daily basis, expressing high expectations for academic success, and helping with homework. Family dysfunction, including marital instability and frequent relocations, predicts school disruptiveness and low achievement (Masten, Best, & Garmezy, 1991; Wang & Gordon, 1994).

Active engagement of family members (e.g., participating in school management teams, being involved in parent-developed workshops, providing tutoring, assisting teachers in classroom or after-school activities) is associated with improved student achievement; increased school attendance; and decreased student dropout, delinquency, and pregnancy rates. Furthermore, educational intervention programs designed to involve family members are significantly more effective than those targeted exclusively at students (Epstein, Salinas, & Simon, 1996; Walberg, 1984). Parents who participate in these programs are more often pleased with themselves, are more likely to enroll in educational courses, and tend to provide better support to their children. The love, interest, and support of a single family member can mitigate against adversities and promote children's educational resilience (Taylor, 1994).

The School

Influences such as teacher actions and expectations, effective instructional methods and curriculum, schoolwide policies, and school climate play key roles in raising student learning, motivation, and attitudes toward school. These influences are briefly discussed below.

Teachers

A teacher's concern, high expectations, and role modeling are key protective factors that mitigate against the likelihood of academic failure, particularly for students in difficult life circumstances. Sustained, close relationships between teacher and student can reduce stress and provide positive supports. Teachers not only provide institutional support for academic content and skills, but also serve as confidants and positive role models for children. They help students to develop the values and attitudes needed to persevere in their schoolwork and to achieve a high level of academic performance, and they also promote educational resilience by encouraging students to master new experiences, believe in their own efficacy, and take responsibility for their own learning. As shown in Figure 6.1, the

relationship between teacher and student is highly important. "Student and teacher social interactions," for example, is the third most potent of the 22 influences on student learning.

Classroom Instruction and Climate

Instruction and classroom climate affect student learning in significant ways, as Figure 6.1 indicates. Contextual influences such as classroom management, quality of instruction, classroom climate, classroom instruction, and academic interactions are proximal to the learners, affect their day-to-day activities, and have a larger influence on school learning than more distal influences. Furthermore, the research base on classroom instruction indicates selected practices that have consistently produced achievement advantages, including maximizing learning time, setting high expectations for all students, providing ample opportunities for student/teacher interaction, maintaining a high degree of classroom engagement, tailoring instruction to meet the needs of individual students, engaging students in setting goals and making learning decisions, and participating in group learning activities. Selected dimensions of classroom climate are also consistently associated with enhanced student cognitive and affective outcomes, including cooperation among teachers and students; shared interests, values, and goals; an academic orientation; well-organized lessons with clear learning objectives; and student satisfaction.

Curriculum

On the basis of the research synthesis results depicted in Figure 6.1, the influence of curriculum on student learning is moderate. Of the 22 contextual influences, the three representing curricular influences were the 9th, 14th, and 18th most powerful. Although curriculum influences are less powerful than classroom practices and the home environment, they play a pivotal role in the provision of quality education to children who are placed at risk of school failure. In fact, providing all students with the opportunity to learn advanced subject matter content is a tenet of current educational reform efforts and a key resilience-promoting strategy. This is particularly important to children enrolled in compensatory or remedial programs such as Title I, bilingual, and special education.

Although schools attempt to provide for the greater-than-usual educational and related services needs of students who are not achieving well for a variety of reasons, many continue to experience serious difficulties in attaining learning success. Research suggests that the curriculum of the prototypical remedial or compensatory education program often contributes to children's learning problems. Students in pull-out categorical programs often receive watered-down curricula, including

less instruction on higher-order skills, comprehension, and problem solving than their advantaged counterparts receive (Allington & McGill-Franzen, 1989; Pugach, 1995).

We know now that all children, including those with special needs, can achieve high academic standards when provided with challenging curriculum content and instruction tailored to their individual strengths and learning needs. Superior curricula contain learning activities and materials that promote higher-order thought processes and are responsive to student diversity and needs. Such curricula enhance students' motivation and serve as protective factors that promote educational resilience and learning success. By contrast, curricula that are disconnected from students' experiences, culture, and needs can contribute to their learning problems (Wang & Reynolds, 1995).

Schoolwide Practices

Changes in school life, organization, and culture can improve student learning and motivation (Newmann & Associates, in press; Newmann & Wehlage, 1995). Schoolwide practices associated with student achievement and psychosocial benefits include a schoolwide culture that reinforces students' academic accomplishments; public recognition, awards, and incentives associated with school-level achievement; smaller organizational units (minischools, charter schools, houses); an emphasis on student involvement and belonging that reduces feelings of alienation and disengagement; attachment to teachers, classmates, and the school; effective and responsive instructional programs that shield against adverse circumstances; student engagement in school life; and positive social interactions among peers and with adults.

These positive schoolwide practices appear to enhance life satisfaction and general well-being of students, particularly adolescents in schools with a high concentration of students whose circumstances place them at risk of educational failure. As shown in Figure 6.1, school culture was the sixth largest influence on student learning, with a greater impact on students' day-to-day lives than school policies or school demographics. Resilience-promoting school-wide practices include those that contribute to a positive school culture, foster academic achievement, and promote a sense of belonging in the school context.

The Community

Figure 6.1 reveals that community was the 12th most powerful contextual influence on student learning. Communities with well-developed and integrated networks of social organizations demonstrate how community-based actions can help children and youth who live in high-risk circumstances

overcome adversity and facilitate resilience development and schooling success. These communities promote social and cultural norms that consistently express high expectations for good citizenship and educational success of children and youth. This expectation and the key role the community plays in providing protective mechanisms are seen most clearly in efforts to establish cultural norms on alcohol and drug abuse (Bell, 1987). The effectiveness of substance abuse programs is greatly enhanced by integrating community resources.

Local communities can positively affect the social well-being, health, safety, and intellectual life of their residents. Social support by caring adults in the community helps sustain support for task accomplishments and increases community-based opportunities for students to develop new interests and skills (Rigsby, Reynolds, & Wang, 1995). Community-based programs that engage children and youth in such activities as protecting the local environment, conducting food drives for the hungry, and participating in library-based reading programs provide youngsters with firsthand experience cooperating with their neighbors. These activities not only develop participants' knowledge and skills, but also provide powerful evidence that communities support their residents. Through their participation, youngsters learn that they are valued community members, can contribute to the community's well-being, and can help overcome a sense of alienation and disenfranchisement.

FOSTERING EDUCATIONAL RESILIENCE IN INNER-CITY SCHOOLS

Findings from a long-term program of research on resilience development at the National Center on Education in the Inner Cities (CEIC) at the Temple University Center for Research in Human Development and Education are discussed in this section. The program, designed to address the question "What conditions are required to bring about massive improvements in the development and learning of children and youth in this nation's inner cities?" encompasses a range of studies, including synthesis studies of the knowledge base on resilience; comparative field-based studies of low- and high-achieving inner-city schools; correlational studies linking characteristics of resilient students to attributes of their families, classrooms, schools, and communities; survey studies that identify effective practices and policies to promote student learning and other educational outcomes; and intervention studies that demonstrate the impact of resilience-promoting strategies on students' learning, affect, and behaviors (Wang, in press).

Characteristics of Educationally Resilient Students in Inner-City Schools

Using the National Educational Longitudinal Study database, Peng, Wang, and Walberg (1992) found that resilient students had higher self-concepts and educational aspirations, felt more internally controlled, interacted more with parents, and had parents who encouraged them to do their best. Similarly, a consistent pattern of proactive participation and a high level of academic and social interaction with teachers and peers were salient in the findings comparing educationally resilient and nonresilient students in inner-city schools in Houston and Philadelphia (Wang, Waxman, & Freiberg, 1996). Resilient students in the study generally perceived their school and classroom environments to be conducive to learning and deemed as appropriate the standards established by teachers and parents for their academic performance and conduct. Although both groups of students—"resilient" and "at-risk"—reported that a good or bad day depended on the occurrence of classroom fights or disruptions requiring teacher intervention, resilient students tended to perceive the problem from a nonparticipatory perspective, whereas at-risk students often were directly involved.

A consistent characterization of resilient students in inner-city schools has also surfaced from the interview protocols of teacher participating in the study. Teachers described resilient students as having someone who cares for them, doing well academically despite exposure to a variety of adverse situations, being responsible and more mature socially, completing school assignments, being focused and not distractable, valuing education, and having the ability to draw on personal strengths. These characterizations are also consistent with those described in the early resilience literature (Masten et al., 1991).

The resilience construct has also provided the conceptual base for a series of studies on the capacity of adolescents from minority backgrounds to maintain a positive self-concept and constructive attitudes toward school and education despite exposure to adverse social circumstances (Taylor, 1994). For example, Taylor found that, despite perceived discrimination, many African-American adolescents maintain a positive self-concept. This finding contradicts the argument that African-American adolescents' perceptions of discrimination result in low academic achievement, a devaluing of the importance of school performance, and a social and racial identity at odds with academic achievement. Taylor's research suggests that African-American adolescents do not necessarily internalize negative messages—rather, that awareness of racial discrimination may cause them to attach greater importance to educational accomplishment. Even in the face of threats to self-concept, such as discrimination, individuals may be able to maintain positive views of themselves—an attribute of resilient adolescents that allows them to react in constructive ways that advance their development and learning success.

Characteristics of Inner-City Classrooms and Schools That Promote Educational Resilience

Research on effective inner-city schools (Wang, Freiberg, & Waxman, 1996; Zetlin, Reynolds, & Wang, 1995) has found consistent patterns of organizational and behavioral characteristics that are reflective of findings from the general literature on effective schools. Among the effective organizational features are strong leadership by the principal, shared decision making, and esprit de corps among staff. Instructional features linked to positive educational outcomes include well-managed classrooms, challenging instruction, and student choice in selecting instructional activities. The schools had strong parental involvement programs and were described as having a pleasant school climate and attractive physical facilities.

Inner-city schools with these features also are linked to more positive classroom processes and higher academic performance, compared with other schools that have high concentrations of students living in adverse circumstances (Wang, Waxman, & Freiberg, 1996). Students in the effective schools spent more time working independently, teachers spent more time interacting with students, and students expressed more positive perceptions about their schools overall. Students were more satisfied with their schoolwork and peer relationships, thought classroom rules were made clear to them, felt more involved in school, perceived their parents as more involved in their schoolwork, and believed that their teachers were supportive and held high expectations of students. Further, students had higher aspirations, more achievement motivation, and better social and academic self-concepts than students at risk of school failure enrolled in ineffective schools.

These findings are consistent with recent studies of effective schools that identified organizational and instructional practices that enhance student achievement, motivation, and positive attitudes and promote educational resilience among socially and economically disadvantaged children (Teddlie & Stringfield, 1993). Greater achievement than one would predict from socioeconomic status was obtained at schools that devoted a high percentage of time to academically focused tasks. The atmosphere in these schools was generally described as friendly; principals and teachers protected the time spent on academic tasks and ensured that students' academic programs were well coordinated; and principals were engaged in school events, led the selection and retention of their faculties, valued high academic achievement, and supported library activities in the life of the school. Teachers whose students achieved higher levels of academic attainment employed planning, clearly specified management and disciplinary rules, set high academic standards for all students, actively taught higher-order thinking skills, and used direct instruction when appropriate.

Similarly, high-achieving inner-city schools show evidence of enabling conditions that result in high levels of student engagement (Freiberg, Stein, & Huang, 1995; Wang, Freiberg, & Waxman, 1996). These include, for example, an orderly and safe school campus; student-centered and highly responsive classroom learning environments with well-structured classroom management systems; a site-specific and ongoing professional development program for the school staff, based on implementation needs identified by teachers and administrators; and parents with high educational aspirations for their children. These enabling conditions, coupled with an organizational capacity for continuous learning and renewal, produced high levels of student engagement and achievement.

Research and practical wisdom suggest that when competently implemented, effective schoolwide strategies serve as protective factors that mitigate against the adversity that abounds in inner-city environments. As noted by Rutter, Maugham, Mortimore, Ouston, and Smith (1979), children living under conditions that are not supportive of psychosocial well-being may experience their school as a force for good or for bad, depending on the programs and internal conditions.

EFFECTIVE SCHOOL RESPONSES TO STUDENT DIVERSITY

Schools today, particularly urban schools, are challenged to serve an increasingly diverse student population. In the past, schools responded to the diverse needs of students through specially designed categorical programs. Albeit well intentioned, these narrowly framed approaches to serving the often multiply co-occurring needs of students frequently place children at even greater risk. Recent research on effective school responses to student diversity suggests the need for major—in some cases, revolutionary—institutional changes (Wang & Reynolds, 1995; Wong & Wang, 1994). These changes require a broad-based approach that considers all organizational and operational features of the school context: classroom practice, curriculum, school organization, restructuring of service delivery, and school and district policies. These essential components of schools can be coherently joined to create nurturing learning environments that are responsive and effective in fostering educational resilience and learning success of every student.

Meta-Analysis of Inclusive Approaches to Provide for Student Diversity

Historically, categorical or so-called second systems programs have been used to provide services to special education, Title 1, limited-English-proficient, and other students with diverse needs, including gifted and talented children. The benefits of the categorical approach to addressing the needs of diverse student populations have been challenged, particularly the use of extra-class placement. In

1982, a National Academy of Science report (Heller, Holtzman, & Messick, 1982) specified that children should be placed in separate classes only if they could be accurately classified and if the noninclusive practices demonstrated superior benefits. Disturbingly, Heller et al. reported that not only does placement of large numbers of children in special programs not lead to improved learning, but it also adds further risk through demeaning labels and increased educational segregation.

The educational segregation of students who require greater than usual educational and related services support is particularly troubling in urban schools where more than 50% of students are in pull-out programs (Wong & Wang, 1994). Rules and regulations put these programs largely out of local control, and procedural requirements often overshadow attention to educational substance and learning progress. Furthermore, the requirements do not ensure the kind of accountability intended for achieving better educational outcomes of children and youth from ethnically and language-diverse backgrounds or for those considered at risk of educational failure.

The inclusion of children with special needs in regular classrooms and schools has received increasing support as a systemic educational improvement strategy (Commission on Chapter 1, 1992; Wang & Reynolds, 1995). Implementing inclusion requires changes in educational philosophy, curriculum, instructional practices, and school organization. Further, such approaches respond to the increasing demands for schools to address the scientific and legal basis for noninclusive practices and to explain why so many students are set aside in categorical programs in which they continue to fall behind their peers. Findings from a recent meta-analysis (Baker, Wang, & Walberg, 1994) indicate that inclusive practices confer small-to-moderate benefits on the standardized achievement test scores of special needs students and on their social outcomes as measured by self, peer, teacher, and observer ratings of classroom behaviors and interactions. Outcomes for nonspecial needs children indicate that many benefit socially from their relationships with students with disabilities and from participating in a caring school community (Staub & Peck, 1995).

School Restructuring of Curriculum and Service Delivery

Researchers using an action research design conducted a series of intervention studies on how schools can be more responsive to student diversity by changing their organization and by using innovative approaches to service delivery. A series of studies in an inner-city comprehensive high school and a middle school examined the feasibility and effects of implementing small unit organization to improve student engagement, curriculum articulation across disciplines, and cross-disciplinary collaboration and collegiality among school staff (Oxley, 1994). Findings suggest the following

requirements: (a) a consistent pattern of changes that modify the school culture (e.g., changing the mind-set of administrators and the teaching staff on how learning takes place); (b) implementation of coordinated approaches to organizing school resources; and (c) staff development that focuses on developing strategies and expertise for meeting the diverse needs of students. These changes produced significant improvements in teacher attitudes toward school and in the ability of teachers to institute radical changes in the service of students, as well as enhanced student motivation and improved student achievement.

Collaborative studies have focused on improving the learning of individual students by providing a systematic process of learning needs assessment and coordinated service delivery in five inner-city elementary schools (Zetlin & MacLeod, 1995). These studies involved planning and implementation activities to adapt school programs and related services to meet the unique needs of many students from ethnic and language-diverse backgrounds. The findings suggest five common features that facilitated program implementation at the study sites:

1. The school staffs believed that students of diverse backgrounds and educational histories could succeed, and they tailored their teaching methods to meet the needs of those students who did not adapt well to traditional schooling. No students were intentionally screened out, nor were any programs permitted that would attract only certain groups of students.
2. The schools using either small unit organization or the restructuring of school curriculum, resources, and service delivery had a stable, intimate, and collegial context for teaching and learning that helped meet the needs of students at the margins.
3. A decentralized system of school management was employed in which school staff had greater authority and flexibility and engaged in collaborative group processes; parents accessed teachers more readily; students' academic programs were more coherent; and all teachers shared a sense of responsibility for student success.
4. The school staffs had access to the knowledge base on effective classroom and schoolwide practices and systemic reform strategies.
5. The schools employed systematic, site-based, professional development.

Findings from the research syntheses and intervention studies discussed indicate the feasibility and effectiveness of improving a school's capacity for achieving educational resilience and learning success of students by using an inclusive approach to service delivery. The restructuring of schools' curriculum and service delivery, when combined with the creation of inclusive, stable, supportive learning environments and increased access to family, school, and community resources, can promote the healthy development and learning success of students at risk of school failure.

Forging Family-School-Community Connections

It is widely acknowledged that working alone, neither schools, nor social and health agencies, nor the fundamental unit of our society—the family—can meet the needs of children and youth in circumstances with co-occurring risks. Thus, an organizational, professional, and institutional movement has emerged from the current wave of school reform efforts to address the multiple and interconnected needs of inner-city children and their families. Referred to variously as the "integrated," "collaborative," "coordinated," or "school-linked" services movement, its goal is to harness the resources of family, school, and community to create contexts that support students' learning success by meeting the physical and social wellness needs of students and their families (Dryfoos, 1995; Flaxman & Passow, 1995; Rigsby et al., 1995).

Although a variety of innovative programs have emerged across the United States, all of them emphasize coherent and seamless child and family services that promote educational resilience and improved life circumstances of children and youth placed at risk. Ranging from local grassroots community efforts to state- and federal-level initiatives, these programs seek to transform fragmented, inefficient systems of service delivery into a network of coordinated partnerships that cross programmatic and agency lines. Despite unprecedented national attention and a myriad of programmatic initiatives at all levels, solid information on the features, scope, and effectiveness of these programs is just becoming available.

A practical savvy about what does and does not work is emerging. Although many of the coordinated service programs are still in the formative stage, the extant database suggests some insights and practical guidelines. Crowson and Boyd (1993) concluded that cost savings from service coordination should not be expected. Further, implementation of service coordination can be an extremely difficult undertaking—in terms of organizations (with legal complications, bureaucratic immobility, turf battles, and communication breakdown) and the deep structures of schooling (the fundamental ways schools work and professional role interpretation).

FUTURE DIRECTIONS AND CONCLUSIONS

Advances in resilience research have led to more detailed descriptions of educationally resilient inner-city children and the identification of protective features of their families, schools, and communities. These protective factors mitigate against risks, vulnerabilities, and adversities while promoting academic and later life success. Evidence from these research studies has informed the design

of resilience-promoting interventions for inner-city environments. On the basis of the research studies described in this chapter, we suggest two potentially fruitful areas for further development: (a) implementing an inclusive approach to respond to student diversity; and (b) implementing family-school-community partnerships.

Implementing an Inclusive Approach to Respond to Student Diversity

Educational environments that are responsive to human diversity treat differences among students as strengths that can be built upon or as needs that must be accommodated. Unresponsive and ineffective systems of delivery ignore individual differences or, even worse, treat student differences in a stigmatizing manner that reduces learning opportunities. Research on educational resilience stresses the importance of responding to children's differences, not as deficiencies, but as starting points for uniting the resources, talents, and efforts of families, teachers, schools, and communities in order to overcome adversity and promote learning success. A major premise of implementing inclusive practices is the restructuring of curriculum and service delivery to promote academic and social benefits for children at risk of school failure and to enhance the sense of community among all participating students.

Taking stock of what is known from research and practical knowledge of educational reform, specific recommendations were made by participants in one of CEIC's invitational conferences on making a difference for students at risk (Wang & Reynolds, 1995). The recommendations serve as a provocative list of strategies for improving schools' capacity for addressing the diverse needs of individual students:

- Make public schools inclusive and integrated.
- Organize schools into smaller educational units—minischools, charter schools, or houses—in which groups of students and teachers remain together for several years of study.
- Augment research on "marginal" students to provide a growing knowledge base and credible evaluation system.
- Implement new approaches based on what is known about teaching in schools that have a high concentration of students with special needs.
- Expand programs for the ablest students.
- Integrate the most current findings in general and special education and special language learning areas into teacher education.
- Apply concepts of inclusion and integration to the bureaucratic structure of educational governance, professional organizations, and advocacy groups.
- Challenge federal and state authorities to create broad, cross-departmental "empowerment zones" for delivering coordinated, comprehensive child and family services.
- Encourage public dialogue about education.

Implementing Family-School-Community Partnerships

The multiple risks and adversities faced by many children and youth cannot be addressed by the family, school, or community alone. Rather, the resources within these three contexts must be harnessed if we are to advance toward solving the educational, health, psychological, and social problems that confront families and their children. Strategies for successful partnerships have been culled from the research base on implementing family-school-community partnerships (Grey, 1995; Kirst, Koppich, & Kelley, 1994; Rigsby et al., 1995; U.S. Department of Education & American Educational Research Association, 1995). These strategies can be used to build the capacity of inner cities and their institutions to promote healthy development and educational resilience among children and youth. Research-based knowledge and a philosophy of cultural diversity serve as the foundation of successful partnerships. The research community provides school practitioners, parents, and community service providers with easy access to the knowledge base on the contexts, processes, and outcomes of successful family-school-community partnerships.

Prior to establishing successful partnerships, participants must realistically assess the money, time, and tangible resources needed for sustained successful operation. Effective partnerships are site-specific and designed to meet the local needs and co-occurring risks that are prevalent in the lives of the children and families being served. Their program design takes into account stakeholder interests, staff expertise, resource availability, and policy guidelines. Administrative mechanisms are created that manage the partnership's processes and that authorize actions to implement agreements. Participants in the partnership should be provided with ample opportunities to learn about the cultures of participating clients, agencies, and organizations. Although high engagement of all participating groups is encouraged, long-standing difficulties among participating groups need to be addressed and differences among clients' levels of active participation should be acknowledged. Successful implementation of partnerships depends on a shared responsibility among all local stakeholder groups.

Research also indicates that long-term resources, support, and follow-through for the partnership depend on the establishment of a constituency that supports its efforts. In particular, partnership stability can be enhanced through changes in funding that would reduce the currently fragmented grant structure and new noncategorical ways to support services. A final strategy for successful implementation is to conduct formative evaluations of the partnership program and redirect program efforts based on results. Summative evaluations can be conducted when the program has been in place long enough to allow a fair evaluation of effects.

Educational resilience is a potentially powerful construct for fostering resilience and educational success of children and youth who are enduring stressful life circumstances. Research has identified a compelling set of protective factors within the child, family, classroom, school, and community that mitigate against failure and promote healthy development. The family, school, and community environments are overlapping contexts in which the events and conditions that influence one context also influence the others. Resilience is promoted when the resources in these contexts are united and dedicated to the healthy development and academic success of children. The likelihood of successful educational outcomes further increases when the values and norms expressed in these three contexts are congruent.

Using resilience-promoting strategies, schools can enlist the tangible and intangible resources of families and communities to better meet students' needs. Research results suggest a portrait of a resilience-promoting inner-city school that includes the following characteristics:

Inclusive practices
Small school size
Heightened engagement of students and teachers in the life of the school
Effective instructional practices empirically linked to achievement advantages
Orderly and structured academic school climate
Sustained, caring, supportive interactions among teachers and students
Challenging curricula tailored to meet the needs and talents of individual students
Active parent-school-community partnerships that make health, social, and educational resources more accessible to students and families
Ample opportunities for students to participate in valued activities
Site-specific professional development program
Organizational capacity for change and renewal

A decade ago, research on resilience reflected the influence of developmental psychologists, psychiatrists, and psychopathologists. Today, the research of educational psychologists and sociologists and the practical knowledge and wisdom of teachers, school administrators, and educational policymakers have introduced new data, hypotheses, and methods that further illuminate the phenomenon of resilience. Increasingly, evidence from school implementation, intervention, and evaluation studies is used to design resilience promoting interventions that protect inner-city children and youth against stressful life circumstances.

The picture of U.S. cities that emerges out of the resilience research should encourage hope, not despair. The research findings are contrary to the picture of inner-city life that stresses deficiency, negativity, and hopelessness. As the research on educational resilience expands, inner-city educators

will have more information on how to construct positive, healthy environments that advance the psychological and social abilities of their most vulnerable students. In this way, the research community contributes to revitalizing our nation's inner cities.

Margaret C. Wang is a Professor of Educational Psychology and Director of the Temple University Center for Research in Human Development and Education (CRHDE). Geneva D. Haertel is a Senior Research Associate at CRHDE. Herbert J. Walberg is a Professor of Education at the University of Illinois at Chicago.

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The Laboratory for Student Success

The Laboratory for Student Success (LSS) is one of ten regional educational laboratories in the nation funded by the U.S. Department of Education to revitalize and reform educational practice in the service of children and youth.

The mission of the Laboratory for Student Success is to strengthen the capacity of the mid-Atlantic region to enact and sustain lasting systemic educational reform through collaborative programs of applied research and development and services to the field. In particular, the LSS facilitates the transformation of research-based knowledge into useful tools that can be readily integrated into the educational reform process both regionally and nationally. To ensure a high degree of effectiveness, the work of the LSS is continuously refined based on feedback from the field on what is working and what is needed in improving educational practice.

The ultimate goal of the LSS is the formation of a connected system of schools, parents, community agencies, professional organizations, and institutions of higher education that serves the needs of all students and is linked with a high-tech national system for information exchange. In particular, the aim is to bring researchers and research-based knowledge into synergistic coordination with other efforts for educational improvement led by field-based professionals.

LSS Principal Investigators

Margaret C. Wang
Executive Director, LSS
Professor of Educational Psychology
Temple University

Aquiles Iglesias,
Associate Director, LSS
Professor and Chair of Communication Sciences
Temple University

Lascelles Anderson
Center for Urban Educational Research and Development
University of Illinois at Chicago

David Bartelt
Professor of Geography and Urban Studies
Temple University

Jennifer Beaumont
Senior Research Associate
Center for Research in Human Development and Education
Temple University

David Bechtel
Senior Research Associate
Center for Research in Human Development and Education
Temple University

William Boyd
Professor of Education
Pennsylvania State University

Bruce Cooper
Professor of Education
Fordham University

Ramona Edelin
President and Chief Executive Officer
National Urban Coalition

Fenwick English
Vice Chancellor of Academic Affairs
Purdue University at Fort Wayne

Patricia Gennari
Director of Special Projects
Penn Hills School District

Geneva Haertel
Senior Research Associate
Center for Research in Human Development and Education
Temple University

Penny Hammrich
Assistant Professor of Science Education, Curriculum, Instruction, and Technology in Education
Temple University

Jeong-Ran Kim
Senior Research Associate
Center for Research in Human Development and Education
Temple University

Jane Oates
Director of Services to the Field
Center for Research in Human Development and Education
Temple University

Ruth Palmer
Associate Professor of Educational Administration and Secondary Education
The College of New Jersey

Suzanne Pasch
Dean
Education and Graduate Studies
The College of New Jersey

Sam Redding
Executive Director
Academic Development Institute

Maynard Reynolds
Professor Emeritus of Educational Psychology
University of Minnesota

Timothy Shanahan
Professor of Urban Education
University of Illinois-Chicago

Denise Maybank-Shepherd
Project Implementor
LSS Extension Services
The College of New Jersey

Sharon Sherman
Associate Professor of Elementary and Early Childehood Education
The College of New Jersey

Betty Steffy
Dean
School of Education
Purdue University at Fort Wayne

Floraline Stevens
Evaluation Consultant
Floraline I. Stevens Associates

Judith Stull
Associate Professor of Sociology
LaSalle University

William Stull
Professor of Economics
Temple University

Ronald Taylor
Associate Professor of Psychology
Temple University

Herbert Walberg
Professor of Education
University of Illinois

Carol Walker
Associate Professor of Education
The Catholic University of America

Robert Walter
Professor Emeritus of Education Policy and Leadership Studies
Temple University

Roger Weisberg
Professor of Psychology
University of Illinois at Chicago

Kenneth Wong
Associate Professor of Education
University of Chicago

William Yancey
Professor of Sociology
Temple University

Frank Yekovich
Professor of Education
The Catholic University of America

For more information, contact Cynthia Smith, Director of Information Services, at (215) 204-3004 or csmith6@vm.temple.edu.
To contact the LSS: **Phone: (800) 892-5550**
E-mail: lss@vm.temple.edu
Web: http://www.temple.edu/departments/LSS